ADO 100
A REVOLUTION
IN PRICE/PERFORMANCE
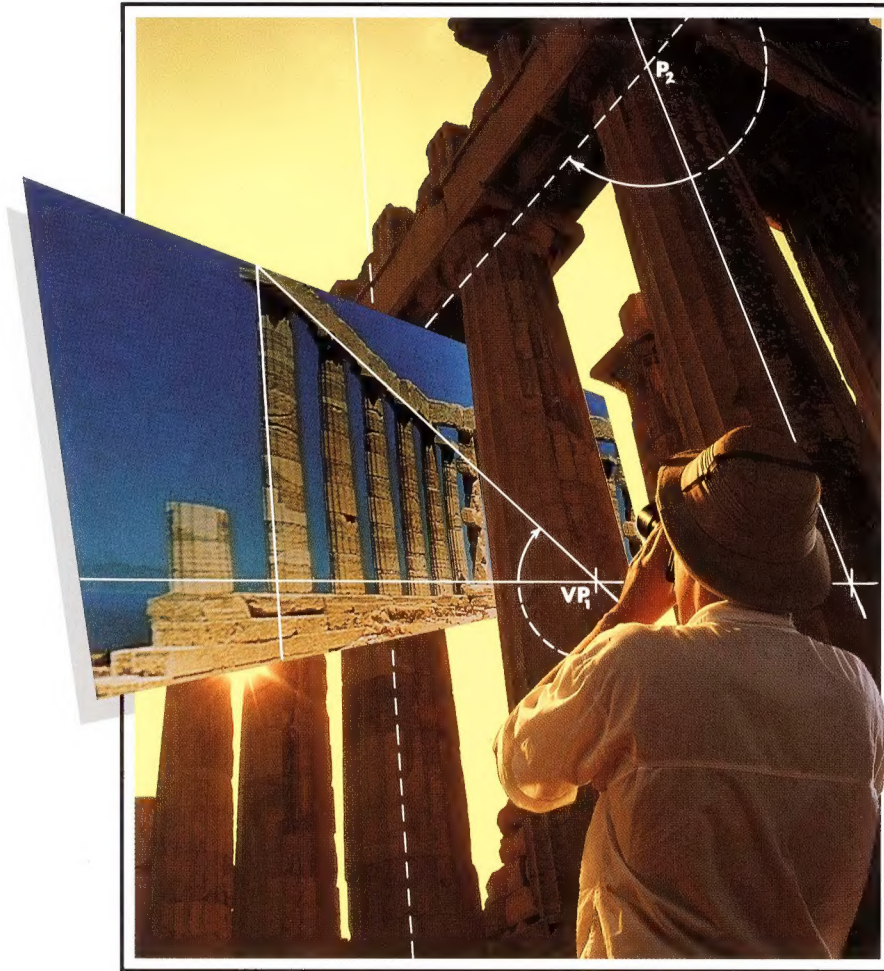
AMPEX

AN ADO® SYSTEM THAT ANY—YES, *ANY*—FACILITY CAN AFFORD.

SKEPTICAL? We can understand why you would be. After all, who'd expect *Ampex digital optics*—client winning, exciting, high quality digital optics—to be priced so any facility could afford it?

The new Ampex ADO 100 system is all these things, and more. And we'd like to show you not only how we did it, but how you can use the ADO 100 system to add excitement to your productions, and a sparkle to your clients' eyes.

We'll also show you, step-by-step, just how simple this ADO system is to operate, and how you can be "flying" video within hours of a completed installation!

The ADO 100 system's double-digital filtering takes a weighted average of *many* input pixel values to ensure *true optical* output picture quality.

A completely new approach. Our goal was to make ADO quality and effects accessible to more people. After all, your audiences are becoming more sophisticated—they expect the latest and most interesting effects, and they won't tolerate poor quality. Neither should you. To reach this goal, we knew we'd have to design a product with true ADO quality and true ADO effects that any facility could afford. We

Exceptionally smooth motion and glitch-free transitions, plus *true* variable perspective, give you convincing movement and dimension.

used eight years of experience in special effects to do it.

Compromising quality to make a cost target wasn't an option, so we used true CCIR-601 (4:2:2) internal picture processing and digital comb filtering. We also incorporated our proprietary separable architecture which filters vertical and horizontal picture information separately. And to deliver the highest possible quality *and* reliability, we even designed our own custom chips especially for the ADO 100 system.

As a result, the ADO 100 system gives you video quality and flexibility unequaled by any effects system in its price range. For example, perspective and rotation are realistic, even at low speeds. Motion is smooth and free of glitches. And the picture is clean, even in the fine detail areas. In fact, the picture is so transparent that an ADO system is used for "touching up" or repositioning video

An ADO 100 system gives you full rotation on all 3 axes for unrestricted flips, tumbles and Z axis spins, even with the basic 2D version.

(like squaring a tilted horizon) even more often than it is used for creating special effects. After all, eliminating reshoots can be extremely important, in terms of both time and money.

Whether you're adding some "fixes," or are searching for a new look, with ADO the picture quality of the final output equals the picture quality of your input. This means neither your creativity nor your imagination is compromised by your tools.

And that is, after all, what the legend, and the reality, of ADO is all about.

Powerful effects storage. With 24-effect on-line storage and unlimited off-line storage, saving your work is fast, simple and reliable. You can decide to break off an edit session and continue it at a later time, and be secure in the fact that "the look" you developed originally will be preserved.

You can do library management and directory functions off-line on a PC to save studio time. And your effects are saved by name, not just numbers, on MS-DOS compatible disks, so you know at a glance which

effect is which—it makes archiving and retrieving effects a snap!

The most powerful special effects/switcher package available. With the unique Digi-Loop™ package, the ADO 100 system and the Ampex Vista switcher are both operated from a *single* console with common memory functions, graphic display and keyboard. The Digi-Loop system offers entirely new classes of effects, like wiping and keying inside the ADO image, eye-catching wipe/pull page turns, resizing and flying chroma keys, and much more.

A comprehensive graphic display, with menus that are easy to use, make the creation of ADO 100 effects simple and precise.

The keypad allows "by the numbers" operation, providing precise, accurate positioning and time-saving repeatability.

A Digi-Matte™ key channel is *standard* on every ADO 100 system. It gives you an easy way to create "flying" logos, characters, and objects without the cost of additional channels, or the bother and expense of matte reels.

A mosaic wipe inside an over-the-shoulder image provides an imaginative transition. Borders can be any size and color, and mosaics, like virtually all effect variables, can be turned on and off at any point in an effect.


Expansion and posterization are just two of the many types of effects available to add novelty and excitement to your productions.

The ADO 100 system's joystick gives the operator complete control over keyframe and set-up parameters. For example, for rotation and location, the image moves in the same direction as the joystick, and values set by the joystick are continually updated as the joystick is moved.


Running effects is as simple as a single keystroke, so even operators with limited training can easily execute a complex series of effects.

Tilting the raster and adding perspective gives a whole new dimension to titles, credits, or other written information on screen. Here's how easy it is to create this look with the ADO 100 system. With an art card, or with your character generator as the ADO input, just:
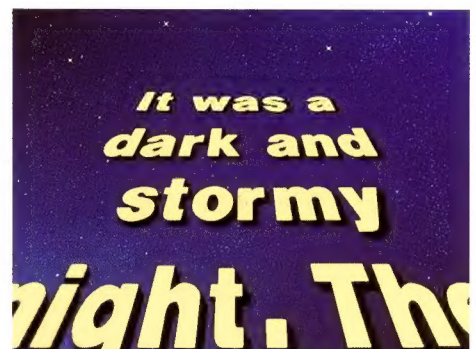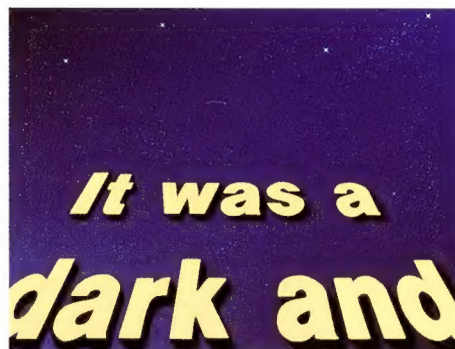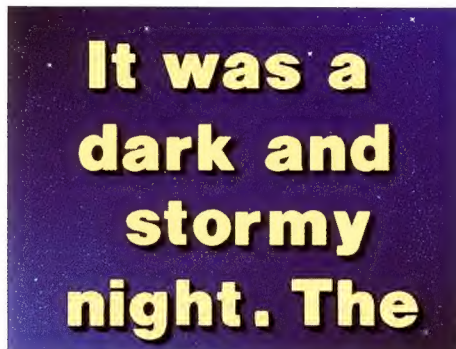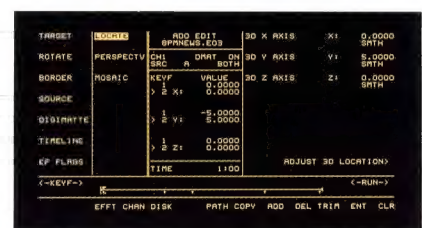

**1** Press DIGIMATTE in the left column, then DIGIMATTE ON in the right column.
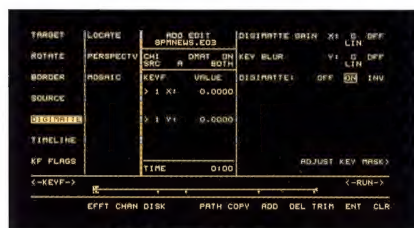
2 Grab the joystick. Press ROTATE in the left column and *push* the joystick up to tilt the plane back slightly.

3 Press ENTER to make a new keyframe, and *push* the joystick up to move the letters up across the screen.

Press PERSPCTV in the left column; *twist* until you have the amount of perspective you want.
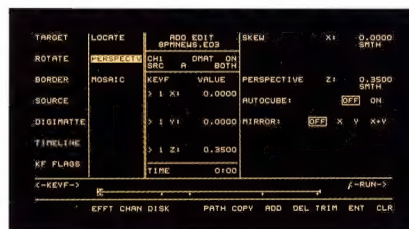
Press LOCATE in the left column and ADJUST 3D AXIS in the right column; *pull* the letters down to the bottom of the screen.

The "over-the-shoulder" image is a popular move in corporate videos and newscasts. With an ADO 100 system, it's as easy as 1-2-3:

KEYFRAME 1

INTERPOLATION

KEYFRAME 2

1 The first keyframe is full frame, with no manipulations. To make a second keyframe, press ENTER. Press TARGET in the left column. *Twist* the joystick to shrink the image, and push right and up to move the image to the upper righthand corner.


INTERPOLATION

INTERPOLATION
KEYFRAME 3
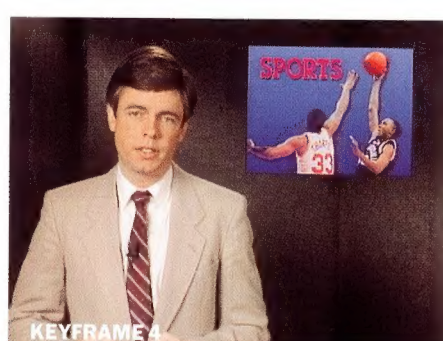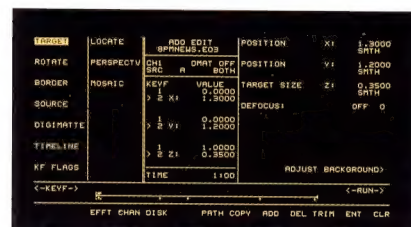
KEYFRAME 4

2 To make another keyframe, press ENTER. Set up the source change from input A to input B by pressing SOURCE in the left column, then SOURCE A/B in the right column. The video will automatically switch sources when the image rotates.

Now press ROTATE in the left column, and then MIRROR X in the right column, so the B video will be face-forward. *Push* the joystick left until the image is rotated edge-on and disappears.

3 Press ENTER to make another keyframe. Continue *pushing* the joystick left to complete the half-rotation.

That's it!
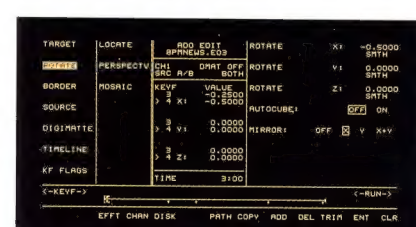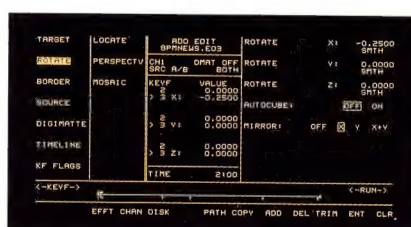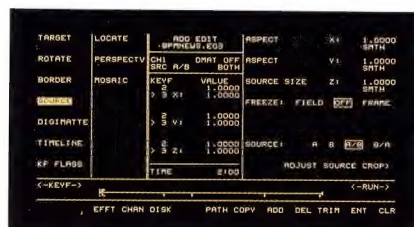
MENU FOR KEYFRAME 3

THE CREDIBILITY OF ADO STANDS BEHIND YOUR FACILITY, AND AMPEX STANDS BEHIND EVERY ADO SYSTEM.

J ust as ADO products bring new excitement and innovation to your video productions, they also bring a tradition of proven performance, reliability, and customer satisfaction.

Of course, Ampex supports every ADO unit with parts, service and training. But for ADO 100 systems, a unique, self-paced training package allows you and your people to be trained at a time that's most convenient for you. This course is complete with video and audio tapes, and a workbook to guide you along at your own pace, in your own facility.

If you prefer, training is available at Ampex training centers, with expert instructors on hand to make sure you derive the maximum benefit in the shortest possible time.

And though our ADO equipment has a long-standing reputation for reliability,

No other manufacturer offers a training package as logical and comprehensive. Audio and video cassettes lead you through the effects process step-by-step, at your own pace.

in case there are problems, Ampex authorized service is available, worldwide.

If, until now, you thought you couldn't afford a true ADO, the ADO 100 system will let you put sophisticated, client-captur-

ing effects in every production, every day. And perhaps more importantly, whether you're flying logos and products, or working with perspective and rotation, you can be sure that your ADO 100 system will always deliver that legendary quality that made ADO products famous, worldwide.

It's an investment you'll come to depend on, whether you use it in corpo-

rate teleproduction, post-production, broadcasting, or as a rugged, reliable, powerful effects system for a mobile van.

Yes, it really is an ADO. And you really can afford it!

Ampex classroom training ensures that operators get the most from the power of their ADO 100 system.

ADO 100 DIGITAL EFFECTS SYSTEM

General

The ADO® 100 special effects system is a high-quality system specifically designed for smaller broadcast, post-production and corporate video facilities. The ADO 100 system provides traditional ADO picture quality, extensive effects, and full upgradeability from a 2D to 3D system.

A Digi-Matte™ key channel is standard with every ADO 100 system, offering the ability to manipulate irregularly-shaped objects such as logos and character generator output. In addition to a Digi-Matte channel, the basic 2D system provides flips, tumbles, spins and zooms. With the 3D option, the system offers true natural perspective on all rotations, as well as variable perspective and off-axis rotation for door swings, barrel rolls and corner-pinned rotations. The powerful Image Innovator option adds the capability to do mosaics, forced monochrome, posterization, solarization and half halo borders. All options can be added in the field, at any time.

Every ADO 100 system comes standard with a comprehensive, self-paced Operator Training Package. The Training Package is centered around a project-oriented workbook, and includes audio cassettes, a VHS video cassette and starter effects disks, allowing new ADO operators to learn on-site at their own pace, quickly, easily and efficiently.

System Description

The basic ADO 100 system consists of a compact control panel, signal system and 3.5-inch disk drive. The control panel features a joystick, fader bar, keypad and 4 by 8 inch graphic display. The interactive menus and comprehensive graphic display with soft-keys provide total control of a broad range of functions.

The ADO 100 special effects system is designed to allow complete integration with a Vista switcher. Both the ADO 100 system and the switcher are controlled from a single panel for virtually transparent operation.

The ADO 100 system conforms to the CCIR-601 standard, with 13.5 MHz sampling and 4:2:2 internal digital processing. Double Digital Filtering, separable architecture, eight-point digital filtering, 32-point address generator and adaptive digital comb filtering all contribute to the finest picture quality, image transparency and reliability in the industry.

Power and Flexibility

With an ADO 100 system, the control the operator has over the entire effects creation process offers virtually unlimited potential for creating new, innovative effects. The degree of programmability, accuracy, repeatability and ease-of-use is unmatched; yet, with all this sophistication and power, an ADO 100 system is easy to learn, and easy to use.

Menus are clear and straightforward, with all primary parameters and functions on-screen and immediately accessible. Values for any parameter can be entered numerically, for precision and accuracy, or the image can be positioned visually with the joystick. The effect can be run at any time during or after creation, using the fader bar or Run key; effects may be run either forward or in reverse. The ADO 100 system
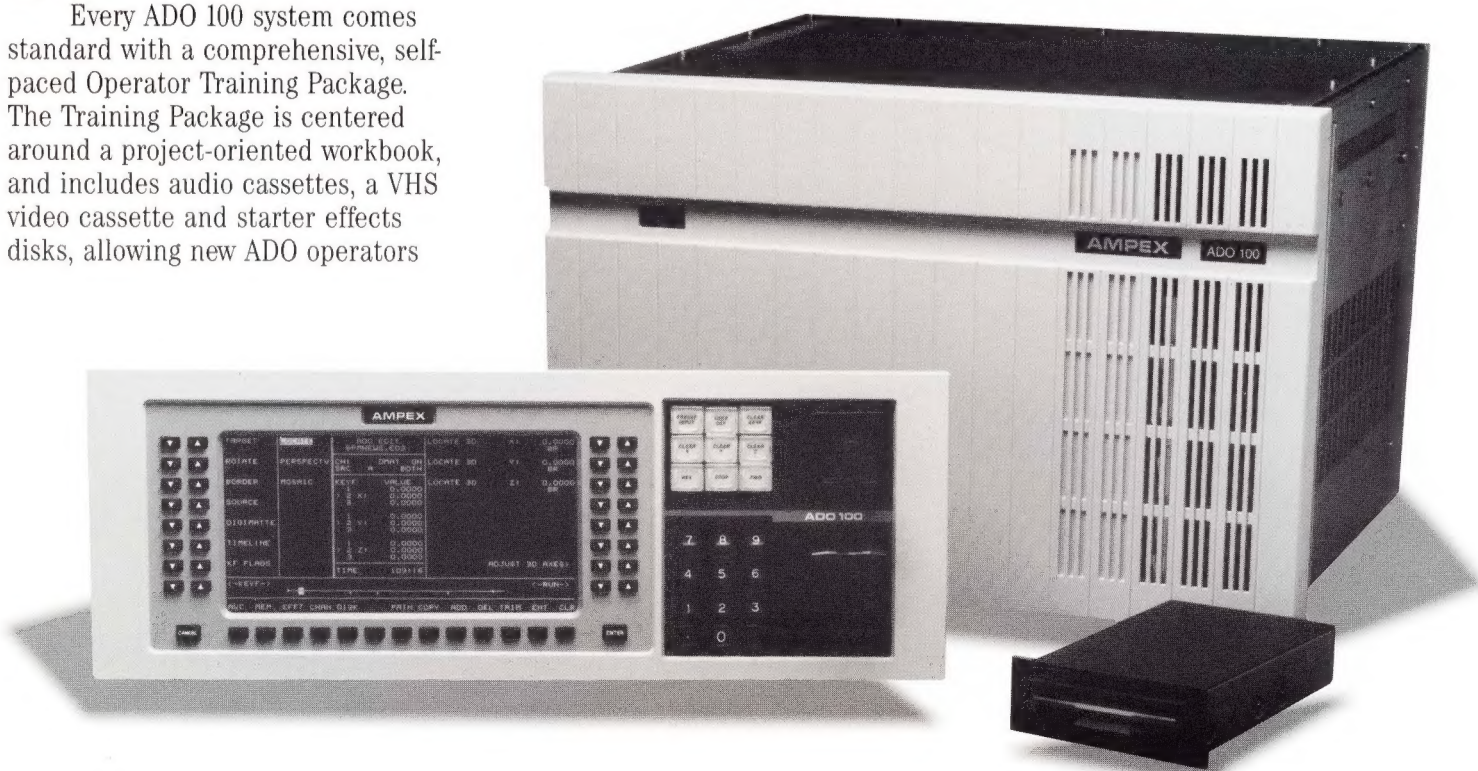
incorporates a variety of powerful operational conveniences, including:

—*Live keyframe editing* for simplicity and speed in creating and editing

—*Keyframe flags,* to allow virtually any effect variable to be turned on or off at any point in any effect

—*A/B video inputs* that can be automatically switched when the image rotates

—*Selectable motion types* that can be implemented for an entire effect, varied from keyframe to keyframe, or even varied by parameter and axis

—*Add keyframe,* allowing the operator to insert a new keyframe in between existing keyframes without altering any characteristic of the effect. The new keyframe will automatically be assigned the parameter values required at that particular point on the timeline.

—*Pauses* that can be added at any point along the timeline, without using a keyframe

—*Independent Global timeline,* to add motion on top of motion easily and precisely and to program the motion path of a multi-faced object, again, easily and precisely.

—Up to *50 keyframes per effect,* in both the local and Global channels for a total of 100 keyframes per effect

—*Effects stored by name and number* for fast, accurate recall

—*24 on-line effects,* for fast, precise on-air recall and execution.

—*Unlimited off-line storage* on 3.5″ MS-DOS* compatible disks. Disk maintenance, archiving and library functions can be done on a PC, leaving the ADO 100 system free for effect creation and editing.

—*Recall and run* of stored effects is quick, precise, accurate and reliable.

*MS-DOS is a registered trademark of Microsoft Corporation.

Effect Features

Standard with every ADO 100 system:
- ☐ Digi-Matte key channel
- ☐ Unlimited expansion and compression
- ☐ Rotation on all three axes for tumbles, flips and Z-axis spins
- ☐ X and Y positioning and Z-axis sizing
- ☐ Variable aspect ratio and source size
- ☐ Horizontal and vertical mirrors
- ☐ Field and frame freeze
- ☐ Keyframe control of freeze for strobe effects
- ☐ Variable border color saturation, luminance and hue
- ☐ Variable border width
- ☐ Picture and key crop

Optional 3D Effect Features
- ☐ True natural perspective on all rotations

- ☐ Variable perspective
- ☐ Off-axis rotation for barrel rolls, door swings and corner-pinned rotations
- ☐ Skew
- ☐ Image location in true 3D space
- ☐ AutoCube

Optional Image Innovator Effect Features:
- ☐ Mosaics with variable tile size
- ☐ Posterization with full luminance reversal
- ☐ Solarization
- ☐ Forced monochrome
- ☐ Operator-controlled rectangular windows for IVP features
- ☐ Digi-Matte key signal windows for IVP features
- ☐ Video defocus
- ☐ Advanced border generator
- ☐ Individual border edge softness and width
- ☐ Half halo borders

Specifications

PERFORMANCE

Luminance frequency response:	NTSC: ± 0.5 dB to 5.5 MHz PAL: ± 0.5 dB to 5.5 MHz (A/D, D/A direct connection)
Video performance:	Differential Phase: < 2° Differential Gain: < 2% K factor (2T pulse): < 1%
Motion performance:	Sub-pixel resolution: 2.3 nanoseconds

DIGITAL SIGNAL SAMPLING

13.5 MHz, 4:2:2	Conforms to CCIR-601 standard

SIGNAL SYSTEM INTERCONNECTS

Video input:	Two independent BNC 75 ohm, 1 volt, composite analog
Key input:	Two independent BNC 75 ohm, 1 volt analog
Reference input:	BNC 75 ohm, 1 volt analog
Video output:	Two BNC 75 ohm, 1 volt composite analog
Key out:	Two BNC 75 ohm, 1 volt, analog, switchable between composite and non-composite
Digital control data:	System is capable of operating with up to 500 feet (160 meters) of cable consisting of RG-58 type coax with a BNC connector interconnecting the control and signal system assemblies.

POWER CONSUMPTION

	110-120 volt, 60 Hz or 220-240, 50 Hz single phase
Signal system:	< 500 watts
Control system:	< 75 watts

PHYSICAL

Signal system chassis:	
Dimensions:	12.5″ (31.8 cm) H × 17.5″ (44.5 cm) W × 20″ (50.8 cm) D
Weight:	80 lbs (30 kg) Can be mounted in 19″ equipment rack or free-standing as a tabletop unit.
Control Panel:	
Dimensions:	7.2″ (18.3 cm) H × 17.7″ (45.0 cm) W × 4.3″ (10.9 cm) D
Weight:	14 lbs (5.2 kg)

Specifications subject to change without notice or obligation.

AMPEX

ADO 100

CCIR-601 COMPONENT DIGITAL EFFECTS SYSTEM

General

The power and flexibility of ADO® 100 special effects are now available to operators of component digital editing and graphics facilities with the availability of the CCIR-601 component digital ADO 100 system.

This system provides powerful 2D or 3D special effects capabilities in either 525 or 625 line environments.

Users of composite or component analog ADO 100 systems can convert to component digital use by installing the optional CCIR-601 digital video interface field upgrade kit.

System Description

Dual digital A/B switching video and Digi-Matte™ key inputs are provided as standard on CCIR-601 component digital ADO systems. Internal processing features patented separable processing and double digital filtering circuits to ensure that the higher quality of component digital video signals is fully maintained under all circumstances.

Field Upgrade Kit

A CCIR-601 digital Video Interface field upgrade kit is available for users who wish to convert existing ADO 100 systems to component digital use. The kit consists of a single board which replaces the normal composite or component analog interface in the ADO 100 signal system, and a new one line delay timing PROM. Installation is easy and requires a minimum of downtime. Conversion back to composite or component analog operation is possible at any time.

Specifications

PERFORMANCE
Operational standards   525 line/60 Hz or 625 line/50 Hz
Motion performance   Sub-pixel resolution: 2.3 ns

DIGITAL SIGNAL SAMPLING
Video   13.5 MHz, 4:2:2:   Conforms to CCIR-601 standard
Key   13.5 MHz, 4:0:0:   Conforms to CCIR-601 standard

SIGNAL SYSTEM INTERCONNECTIONS
Reference   BNC loop through 75 Ohm, 1 Volt,
analog composite Black Burst
Video input   Two independent, 25 pin D connector,
CCIR-656 format with slide latch connectors
Key input   Two independent, 25 pin D connector,
CCIR-656 format with slide latch connectors
Video output   One, 25 pin D connector,
CCIR-656 format with slide latch connectors
Key output   One, 25 pin D connector,
CCIR-656 format with slide latch connectors

POWER CONSUMPTION
   110-120 volt, 60 Hz or 220-240 volt, 50 Hz single phase
Signal system   <500 watts
Control panel   <75 watts

PHYSICAL
Signal System Chassis
Dimensions   12.5″ (31.8 cm) H × 17.5″ (44.5 cm) W × 20″ (50.8 cm) D
Weight   80 lbs (30 kg)
Can be mounted in 19″ equipment rack or
free standing as a table top unit

CONTROL PANEL
Dimensions   7.2″ (18.3 cm) H × 17.7″ (45.0 cm) W × 4.3″ (10.9 cm) D
Weight   14 lbs (5.2 kg)

Specifications subject to change without notice or obligation.

AMPEX

ADO 100 COMPONENT ANALOG DIGITAL EFFECTS SYSTEM

General

The power and flexibility of ADO® 100 special effects are now available to users of component analog editing, telecine and graphics suites with the availability of the component analog ADO 100 system. This system provides powerful 2D or 3D special effects capabilities in several different component signal format environments: 525- or 625-line RGB; Betacam and Betacam SP; MII; and SMPTE/EBU.

Users of composite ADO 100 systems can convert to CAV use by installing the optional Component Analog Interface field upgrade kit.

System Description

Dual A/B switching video and Digi-Matte™ key inputs are provided as standard on Component Analog ADO 100 systems. Separate transcoding amplifiers are provided for each input and output offering flexibility in handling mixed component format signals. For example, an RGB signal may be selected for the 'A' video input, Betacam SP for the 'B' video input and SMPTE/EBU component format as the system output. Selection between RGB and Y, R-Y, B-Y signal formats is by jumpers on the component analog board. Operation in 525- or 625-line modes can be selected from the ADO 100 control panel and requires no hardware modifications.

Internal ADO 100 processing features CCIR-601 component digital sampling, patented separable processing and double digital filtering circuits to ensure that the higher quality of component video signals is fully maintained under all circumstances.

Component Vista Switcher/ ADO 100 Integration

The unique Ampex Digi-Loop™ integration of switcher and digital effects is now available in component analog format. Whether operated from separate control consoles or the optional single control console, complete switcher and digital effects operation in the component analog environment ensures the sharpest keys and cleanest transitions possible.

Field Upgrade Kit

A Component Analog Interface field upgrade kit is available for users who wish to convert existing composite ADO 100 signal systems to component analog use. The kit consists of a single board which replaces the normal composite interface in the ADO 100 signal system and a new one-line delay timing PROM. Installation is easy and requires a minimum of downtime. Conversion back to composite operation is possible at any time by replacing the original composite board and timing PROM.

Specifications

PERFORMANCE

Operational standards	525 line/60 Hz or 625 line/50 Hz
Luminance frequency response (Y Channel)	± 0.5 dB to 5.0 MHz
Chroma frequency response (R-Y or B-Y Channels)	± 0.5 dB to 2.5 MHz (measurements based on direct A/D, D/A connection)
Inter-component delay	Less than 3 ns
Inter-component gain	Less than 1%
Motion performance	Sub-pixel resolution: 2.3 ns

DIGITAL SIGNAL SAMPLING

Video: 13.5 MHz, 4:2:2	Conforms to CCIR-601 standard
Key: 13.5 MHz, 4:0:0	Conforms to CCIR-601 standard

SIGNAL SYSTEM INTERCONNECTS

Reference	BNC loop through, 75 Ohm, 1 volt, analog composite Black burst
Video input:	Two independent sets of 3 BNC, 75 ohm RGB or Y, R-Y, B-Y (Notes 1, 2, 3)
Key input:	Two independent BNC 75 ohm, 1 volt analog
Video output	One set of 3 BNC, 75 Ohm RGB or Y, R-Y, B-Y (Notes 1, 2, 3)
Key output:	Two BNC 75 Ohm, 1 volt analog, switchable between composite and non-composite

POWER CONSUMPTION

	110-120 volt, 60 Hz or 220-240, 50 Hz single phase
Signal system:	< 500 watts
Control system:	< 75 watts

PHYSICAL

Signal system chassis:	
Dimensions:	12.5″ (31.8 cm) H × 17.5″ (44.5 cm) W × 20″ (50.8 cm) D
Weight:	80 lbs (30 kg) Can be mounted in 19″ equipment rack or free-standing as a tabletop unit.
Control Panel:	
Dimensions:	7.2″ (18.3 cm) H × 17.7″ (45.0 cm) W × 4.3″ (10.9 cm) D
Weight:	14 lbs (5.2 kg)

Note 1. RGB signals with or without sync on any or all components are supported. Separate sync (RGBS) is not supported.

Note 2. Both video inputs and system output may be independently selected for RGB, Betacam, Betacam SP, MII or SMPTE/EBU format operation. Professional Y/C or S-VHS video formats are not supported.

Note 3. Operation in 525- or 625-line formats is control panel selectable.

Specifications subject to change without notice or obligation.

AMPEX

ADO® 100 WARP SPEED

ADO 100
WARP SPEED FIELD UPGRADE KIT

General

With warp effects for 3D systems and dual channel operation for both 2D and 3D systems, the Warp Speed Upgrade Kit provides a new level of creative freedom to owners of ADO® 100 special effects systems.

Warps

Warp Speed for 3D ADO 100 special effects systems offers an endless variety of warps, bends and twists to your facility. Page swirls, bowties, flares and shields are all at your fingertips with Warp Speed and your imagination.

Each Warp parameter is individually adjustable, and controllable keyframe by keyframe. Flare, Twist, Shear and Stretch — non-linear changes in aspect ratio — allow you to create the kind of curves and warps you need to bring a new level of excitement to your facility's productions.

And with the standard Digi-Matte™ key channel, even logos, titles, and any other key signal can be curved in flight, warped or peeled off the apparent monitor plane.

The limit is your imagination — Warp Speed brings a whole new realm of power, flexibility and excitement to your digital effects.

Dual Channel Operation

Once users have installed two ADO 100 channels, the new dual channel mode included in the Upgrade Kit allows complete control of either or both channels directly from the ADO 100 control panel. After installation, there are no jumpers to set or cabling to adjust — acquisition of any channel is all under software control.

The two channels and one or two control panels are connected via easy to install, thin-wire ethernet coax. This means that you can "borrow" a channel located in another edit suite for a dual channel, high impact effect, and then "return" it when you're done — all without ever leaving your chair.

For added control, dual channel mode allows you to copy keyframes from one channel to the other — ensuring that, when necessary, the two video sources will line up perfectly both in time and space.

On-Air Menu

Warp Speed offers another new capability: the On-Air shotbox menu. With a single keystroke, the 24 effects stored in the on-line RAM library are organized onto the menu screen, complete with effect name and number.

From there, simply highlighting an effect allows you to run that effect instantly, either forward or backward. The On-Air menu includes full capabilities for trimming size, position and effect duration, giving you the greatest possible flexibility in any on-air or live situation.

Serial Communications

Four new serial communications protocols are included, utilizing RS-422 and RS-232 for both editor and switcher remote operation. The protocols support Betacam remote for editors, and Ampex AVC, GVG 200 (PIP) and GVG 300 (EMEM) switchers.

Operational Enhancements

- [ ] Separate front/back mirrors
- [ ] Selectable Field 1, Field 2 or Frame freeze
- [ ] Enhanced Motion Path copying capabilities
- [ ] Increased on-line library capacity
- [ ] Faster disk storage and recall
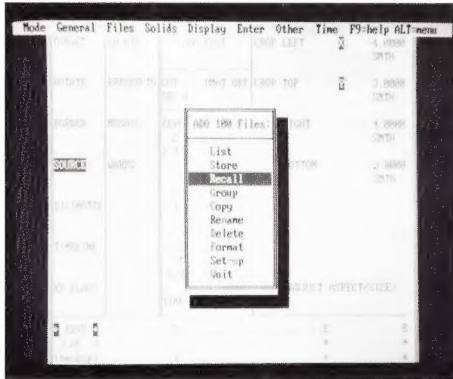- [ ] Crosshairs to locate center of rotation

Requirements

The Warp Packages with the Warp Speed Field Upgrade Kit requires an ADO 100 system equipped with 3D Rotation and Perspective. The Dual Channel Operation requires any two ADO 100 signal systems and at least one control console. The Upgrade Kit can be installed on-site quickly and easily.

AMPEX

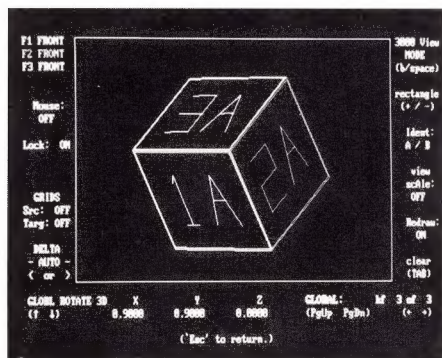# ADO/ACCESS

OFFLINE WIREFRAMING SOFTWARE

ADO®/Access is a software package designed to enhance the overall productivity of your special effects projects. By allowing you to accomplish the meticulous work of precisely setting up or editing effects with an inexpensive personal computer, ADO/Access lets you spend all of the time in the edit suite on design decisions related to the live video content of your project.

With ADO/Access, your personal computer monitor becomes your ADO control panel display — accurately modeling the operational characteristics of ADO 1000/2000/3000 and ADO 100 special effects systems. Any-

one familiar with ADO will be able to learn to use ADO/Access in minutes.

In addition, the actual ADO effect can be previewed right on your personal computer. Using a wireframe representation of the actual video raster boundaries, ADO/Access displays a real-time preview of your effect's motion. To simulate multi-channels systems, the video planes

are labeled so that their relationship and position are always obvious.

Because ADO/Access works with all ADO models, you can use your personal computer to translate effects files between ADO 1000/2000/3000 and ADO 100 systems. And ADO/Access is bi-directional, so you can create an effect on your personal computer or edit an effect that was created on your ADO system.

For the popular "AUTO-CUBE" effects, ADO/Access includes extended features to assist in the construction of simple and complex solid shapes onto whose faces live video is mapped during ADO multi-channel operations. Shapes like Cubes, Slabs,
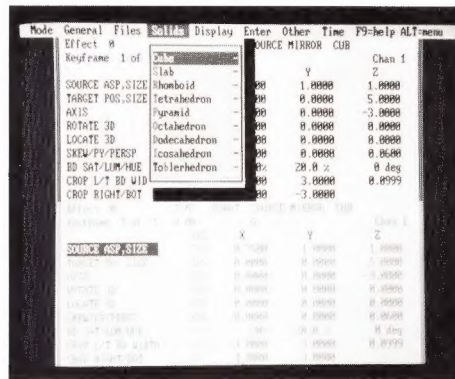
Rhomboids, and Pyramids are quickly assembled, with ADO/Access automatically calculating key ADO parameters like CROP, ROTATION, and ASPECT. ADO/Access also provides utilities to preview and automatically generate multi-layer ADO effects. Plus Access can act as an interface to 3D graphics systems, permitting ADO to be used as a real-time texture mapping device.

Since ADO/Access works with standard IBM-PC compatible systems, you can fit an ADO "effects development system" in the corner of

an edit suite, in your living room at home, or on your lap in an airplane. The flexibility, creative, and business leverage possible with ADO/Access are limited only by your imagination — certainly not by your budget.

Requirements

ADO/Access requires a user-supplied IBM compatible AT or XT with 640K of memory, running DOS 3.x or higher (DOS 3.2 or higher is required to read/write ADO 100 compatible disks). MDA, CGA, EGA, VGA, and Hercules graphics adapters are supported (wireframe display is not available with MDA adapters). A 360K, standard 5¼" floppy disk is required for effects file interchange with ADO 1000/2000/3000 series, and a 3½", 1.44MB floppy is required for interchange with ADO 100 systems. Hard disk is recommended for storage of your effects library.

To achieve optimal performance during wireframe preview, a high speed AT-level computer equipped with the math co-processor is recommended. ADO/Access will also operate with an IBM-PC compatible mouse or joystick, but is not required.
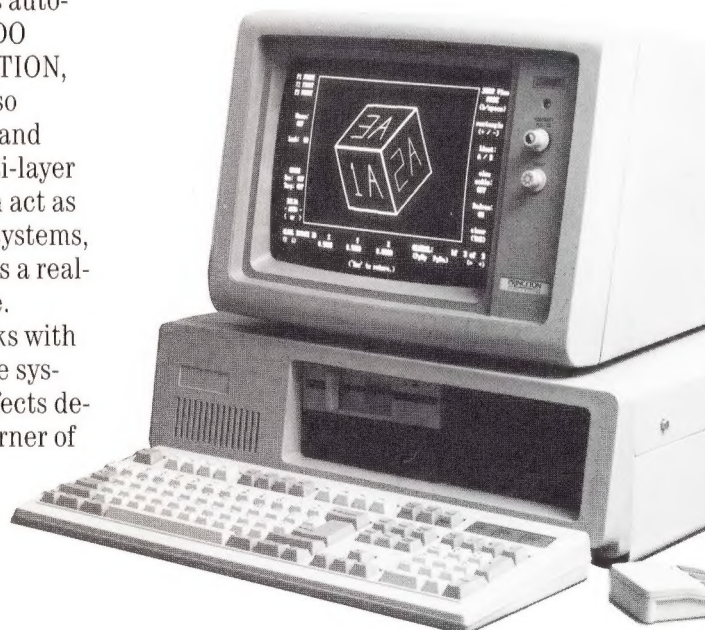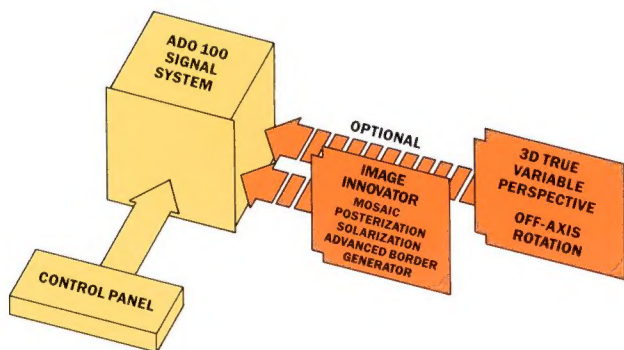
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WE MAKE SURE YOU STAY AHEAD OF THE GAME.

The ADO 100 system's "open architecture" design lets you upgrade your system as your needs change.

We've introduced options and features year after year for our ADO products, so you already know that your ADO 100 system will always be a couple of steps ahead.

Because the ADO 100 system is designed to grow, easily installed enhancements and options are always available. For example, a 2D version can be upgraded in your facility to a fully-optioned 3D system. Or, upgrading can occur option-by-option at any time, depending on the needs of your facility. You can add effects like true perspective, forced monochrome, video defocus, mosaics, posterization, and others. This means that you can always produce exactly the effects you need without "over-investing" in a lot of equipment you don't need.

This unique, "open architecture" design allows you to match your system requirements and special effects capabilities to your budget, without ever sacrificing that famous ADO quality.

FOR INFORMATION ON AMPEX BROADCAST VIDEO PRODUCTS CONTACT THE VIDEO SALES MANAGER NEAREST YOU.

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